# C-Max®

Time-Released Vitamin C

### **DESCRIPTION**

C-Max®, provided by Douglas Laboratories®, supplies 1,500 mg of vitamin C in a time release (6 to 8 hours) tablet.

#### **FUNCTIONS**

Vitamin C (ascorbic acid) has numerous biological functions. Foremost, it is essential for the synthesis of collagen and glycosaminoglycans which are the building materials of all connective tissues, such as skin, blood vessels, tendons, joint cartilage and bone. Vitamin C is the required coenzyme for two groups of enzymes that catalyze the crosslinking of collagen fibers - lysyl hydroxylases and prolyl hydroxylases. As such, vitamin C is essential for normal wound healing and capillary health.

Vitamin C participates in the biosynthesis of carnitine, serotonin, and certain neurotransmitters, including norepinephrine.

Vitamin C is among the most powerful antioxidants in humans and animals. It is a water-soluble, chain-breaking antioxidant that reacts directly with superoxide, hydroxyl radicals, and singlet oxygen. Laboratory studies show that vitamin C completely protects lipids in plasma and low-density lipoproteins (LDL) against atherogenic peroxidative damage. In addition, vitamin C interacts with glutathione and alpha-lipoic acid, and regenerates vitamin E. The antioxidant functions of vitamin C appear to have clinical significance in providing protection from free radical damage to the eyes, lungs, blood and the immune system.

Research has also demonstrated ascorbic acid's ability to positively affect function of the immune system by optimizing synthesis of integral components of our immunological defenses.

Vitamin C is absorbed in the small intestine by a sodium-dependent transport process that is intake dependent. At normal dietary intakes of 60 to 100 mg, up to 80 or 90% of the vitamin C is absorbed. At higher intakes, absorption becomes less efficient. Absorption efficiency and vitamin C utilization may be greatly enhanced during conditions of physiological stress, such as trauma or infection.

#### INDICATIONS

C-Max may be a useful dietary supplement for individuals wishing to supplement their diet with Vitamin C in a time-released tablet.

# **FORMULA (#7964)**

1 Tablet Contains:	
Vitamin C	1,500mg
Bioflavonoid Complex	150mg

## SUGGESTED USE

Adults take 1 tablet daily or as directed by physician.

#### SIDE EFFECTS

No adverse side effects have been reported.

## **STORAGE**

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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## **REFERENCES**

Allard JP, Aghdassi E, Chau J, et al. Effects of vitamin E and C supplementation on oxidative stress and viral load in HIV-infected subjects. Aids 1998;12:1653-9.

Anderson JW, Gowri MS, Turner J, et al. Antioxidant supplementation effects on low-density lipoprotein oxidation for individuals with type 2 diabetes mellitus. J Am Coll Nutr 1999;18:451-61.

Campbell JD, Cole M, Bunditrutavorn B, et al. Ascorbic acid is a potent inhibitor of various forms of T cell apoptosis. Cell Immunol 1999;194:1-5.

de la Fuente M, Ferrandez MD, Burgos MS, et al. Immune function in aged women is improved by ingestion of vitamins C and E. Can J Physiol Pharmacol 1998;76:373-80.

Del Rio M, Ruedas G, Medina S, et al. Improvement by several antioxidants of macrophage function in vitro. Life Sci 1998;63:871-81.

# For more information on C-Max® visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration.

This product is not intended to diagnose, treat, cure, or prevent any disease.

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You trust Douglas Laboratories. Your patients trust you.

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